



EOSDIS

NASA'S EARTH OBSERVING SYSTEM
DATA AND INFORMATION SYSTEM

Interoperability in the Labyrinth

ESIP Summer-2016 OPeNDAP Workshop
Wednesday, July 20th, 2016, 13:00-17:00
(excerpted from an earlier presentation)

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Obstacles to Interoperability

- Mismatched Domains
 - Coordinate Systems
 - Discretizations (Meshes)
 - Spatial & Temporal Scales
- Mismatched Ranges
 - Variable Names
 - Units of Measure
 - Acceptable Noise Levels
 - Quantifying (What's Measured)
 - Cartesian versus Magnitude/Direction
- Effects of (Analytic) Transformation
 - Frequency vs. Space-Time
 - Values vs. Coefficients

More Obstacles...

- Mismatched Concepts
 - Feature Names
 - Classification Schemes
 - Qualitative vs. Quantitative
- Mismatched Structures/Encodings
 - Explicit vs. Implicit Relations (Tables vs. Arrays)
 - Data Structures, Formats & Serializations
- Problems Arising in Software
 - Hardware & OS Dependencies
 - Programming-Language Dependencies
 - All Aforementioned Obstacles, Manifest in Code!

This work was supported by
NASA/GSFC under Raytheon Co.
contract number NNG15HZ39C

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